

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

49

09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT

LOCATION.--Lat 38°28'59", long 109°24'12", in NW^{1/4}NW^{1/4}SW^{1/4}, sec. 4, T. 27 S., R. 23 E. in San Juan County, Hydrologic Unit 14030005 on the left bank 1,000 ft above Sheley Tunnel, and 9 mi southeast of Moab.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--October 1954 to September 1959, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above sea level, from a topographic map. Prior to Oct. 1, 1987 at different site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversion for irrigation above the station. Sheley Tunnel, which diverts water from Mill Creek for K. E. McDougald Reservoir, is located 1,000 ft below the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s Aug. 8, 1993, gage height, 7.66 ft from floodmarks, from rating curve extended above 340 ft³/s on basis of slope-area measurement of peak flow; minimum recorded, 2.1 ft³/s Apr. 5, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 3	0145	271	4.43				
May 21	1345	*322	*4.66	Aug. 13	1727	130	3.57
May 24	1545	94	3.30	Sept. 13	1115	287	4.48

Minimum daily discharge, 3.6 ft³/s Dec. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.3	4.7	5.1	4.8	4.6	7.4	e20	42	18	9.5	11
2	10	6.2	5.1	5.0	4.9	4.6	7.2	17	46	17	8.9	10
3	26	6.2	4.0	7.4	4.8	4.6	7.2	18	45	17	9.6	10
4	7.5	6.2	4.4	5.4	4.8	4.6	12	e24	45	17	15	9.9
5	7.3	6.2	4.7	4.9	4.8	4.5	7.4	e30	44	16	22	9.1
6	7.0	6.0	5.3	5.0	4.9	4.6	6.7	e32	43	15	15	11
7	6.9	5.4	5.2	4.9	4.6	4.6	6.7	e34	41	15	14	12
8	7.0	6.1	5.2	5.5	4.7	4.7	6.7	e38	39	15	14	11
9	6.9	6.0	5.2	5.2	4.8	4.6	6.7	35	39	14	14	10
10	7.0	5.8	5.6	5.0	4.6	4.8	6.6	31	41	14	14	9.9
11	6.9	5.7	5.5	5.0	4.6	5.3	6.0	29	40	14	14	9.9
12	6.9	5.8	5.4	5.0	4.6	6.3	6.1	32	39	13	13	10
13	6.9	5.8	5.4	5.1	4.6	5.9	6.3	39	36	13	15	17
14	6.8	5.8	5.2	5.1	4.5	5.5	6.4	39	35	13	11	8.8
15	6.5	6.1	3.6	4.8	4.6	5.6	6.8	41	32	13	11	11
16	6.6	5.8	5.7	e4.7	4.5	5.7	7.4	47	30	13	11	12
17	6.4	5.6	e5.2	e4.5	4.5	5.8	8.7	49	28	13	11	10
18	6.4	6.0	e5.0	e4.7	4.6	5.6	11	49	26	13	11	9.8
19	6.5	5.7	e5.2	e4.8	4.5	5.9	12	48	27	13	11	9.9
20	6.4	5.8	e5.3	5.0	4.6	6.6	14	45	28	12	11	12
21	6.1	5.7	5.7	5.0	4.4	7.3	15	56	28	12	9.9	15
22	6.2	7.6	5.4	5.0	4.2	7.2	14	42	27	11	9.7	14
23	6.4	6.6	5.4	4.9	4.7	7.7	16	41	26	11	9.3	12
24	6.3	5.9	5.2	4.7	4.5	7.8	13	42	24	11	9.1	12
25	7.6	5.9	5.2	4.9	4.7	6.9	12	39	23	11	9.3	12
26	6.4	5.8	5.2	5.0	4.7	7.0	12	34	22	9.8	12	12
27	6.2	4.9	5.2	5.0	4.8	7.3	13	30	21	9.6	12	12
28	9.3	5.2	5.4	4.8	4.9	7.2	20	27	20	10	12	11
29	6.8	5.8	5.2	4.8	---	7.3	e21	27	20	11	11	11
30	6.4	5.1	5.2	4.7	---	7.0	19	30	19	9.9	9.0	11
31	6.4	---	5.2	4.8	---	7.4	---	39	---	9.8	10	---
TOTAL	236.0	177.0	159.2	155.7	130.2	184.5	314.3	1104	976	404.1	368.3	336.3
MEAN	7.61	5.90	5.14	5.02	4.65	5.95	10.5	35.6	32.5	13.0	11.9	11.2
MAX	26	7.6	5.7	7.4	4.9	7.8	21	56	46	18	22	17
MIN	6.1	4.9	3.6	4.5	4.2	4.5	6.0	17	19	9.6	8.9	8.8
AC-FT	468	351	316	309	258	366	623	2190	1940	802	731	667

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955-59, 1988-97 BY WATER YEAR (WY)

MEAN	8.22	7.34	6.68	6.12	5.79	6.42	11.2	29.0	28.9	14.9	10.0	8.86
MAX	12.1	15.6	11.0	8.82	8.06	9.43	22.2	70.5	67.9	40.7	18.7	13.5
(WY)	1958	1988	1988	1988	1988	1988	1958	1958	1957	1995	1993	1993
MIN	4.84	3.89	4.30	4.60	4.48	4.88	5.42	8.03	7.08	5.32	4.69	5.00
(WY)	1957	1957	1955	1957	1956	1957	1990	1990	1959	1959	1990	1959

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEARWATER YEARS 1955-59, 1988-97

ANNUAL TOTAL	3211.7		4545.6									
ANNUAL MEAN	8.78		12.5									
HIGHEST ANNUAL MEAN										20.4		1993
LOWEST ANNUAL MEAN										6.13		1990
HIGHEST DAILY MEAN	32	May 16		56	May 21		141					
LOWEST DAILY MEAN	3.6	Dec 15		3.6	Dec 15		2.8					
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 30		4.5	Feb 16		3.2					
ANNUAL RUNOFF (AC-FT)	6370		9020				8670					
10 PERCENT EXCEEDS	16		30				23					
50 PERCENT EXCEEDS	6.4		7.3				7.5					
90 PERCENT EXCEEDS	5.2		4.7				5.0					

e Estimated